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PEAGIE TRENCHES. Manuscript sent to Yosemite Nature Notes - J.M.M.

Among the prized articles of diet of the Mono Indians, were the caterpillars of the Pandora moth, better known as "peagies" in the Indian vocabulary. A favorite collecting ground for this material seems to have been the Jeffrey pine forests growing on loose pumice soils in the volcanic country just east of the Yosemite National Park.

So far as can be determined the Indians collected the mature larvae dried them, and stored them away for use as needed. It required some skill and knowledge of the life history of the insect for the Indians to "bring home the bacon" in the peagie industry.

This insect, like the lodgepole pine needleminer goes thru a two year life cycle. The moths fly during a short period every other year, and the caterpillars do most of their feeding on the alternate years. The larvae feed on the pine needles near the top and on the outer limbs of the tree. As they become fully mature toward midseason they crawl down the tree and go into the soil for a depth of one to two inches. Here they form pupal cases in which they remain until the following summer when the moths emerge and fly.

The Indians appear to have collected the caterpillars as they were leaving the tree to enter the ground. In the Mono Lake region the peagies do not appear to have been abundant as the trees show no evidence of either old or recent defoliations. To collect one worm at a time would have been a slow and difficult process so the Indians developed the method of trapping the caterpillars by digging shallow trenches in the loose soil around the base of the trees.

I had frequently heard of these trenches but never observed them until on a field trip near the Inyo-Mono National Forest boundary in August, 1926. One small area was found where some recent worming operations had evidently been going on, as the trenches were quite recent. These circular trenches were from 8 to 10 inches in depth, the inner bank sloping gently away from the tree, the outer bank forming a nearly vertiele wall which the caterpillars could not climb. The probable system was for the squaws to visit the trenches at intervals and collect the caterpillars that had accumulated there.

Near the Mono Mills was found an area which had undoubtedly been one of the favorite worming grounds of the past. Over hundreds of acres every tree above two feet in diameter had been surrounded by one of these peagie trenches. That they had not been used for many years was shown by the fact that the trenches were filled with forest litter and in many cases covered with a growth of young trees and brush. On part of the area a recent fire had burned out the litter so that the trenches clould be readily seen but outside of the burned area it required close observation to detect them. It must have required no small amount of labor fordig these ancient ditches with the primitive toools of the Indians.

In the southern Oregon region the Klamath Indians also used the Pandora moth for food but used the pupal form after it had formed the coccoon in the ground. Here the insects occurred often in epidemic form, defoliating great areas of yellow pine timber. It was possible to secure great quantities of the prepupal cases by scraping off the top layer of the soil. The trench seems to have been a device invented by the Mono Indians because of the relative scarcity of peagies in the Mono Lake region.